Kosñipata Valley, Manú National Park, Cusco, PERU **Bamboos of Kosñipata**

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Photos: Belen Fadrique [bjfadrique@gmail.com]. Produced by the authors with support from Programa Bosques Andinos, NSF and University of Miami, with the assistance of Alicia Diaz and Valéria Sampaio, Field Museum. Part of the doctoral thesis of BF at the University of Miami. Legend: CF = Cloud Forest. The species in this work are distributed along elevational gradients (Puna ~3600m a.s.l.; Treeline ~3400m a.s.l.; Upper CF ~2200-3400m a.s.l.; Lower CF ~1200-2200m a.s.l.; Premontane ~500-1200m a.s.l.).

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The Kosñipata Valley in Manu National Park extends from the premontane forests, adjacent to Amazonia, to the high elevation mountain tops such as Apu Kañachuay (~4200m a.s.l.). This incredible diversity of habitats harbors numerous bamboo species. Up to now, we have identified nine bamboo species and there are at least 15 other morphospecies that are unassigned. The bamboo species found in the valley generally have monocarpic flowering with lifecycles that can extend up to thirty years, however the lifecycle length of many species is still unknown. Given the general scarcity of flowers, bamboo identification is regularly made using vegetative characters. For this purpose, it is important to note the characteristics of bamboo culms and nodes, their culm leaves, branching pattern and branch leaves. See Fadrique et al. (2020) for a detailed description of bamboo morphology and specimen collection.

Puna ~3600m a.s.l. (Photos 1-5)



Chusquea intipaqariy



Chusquea intipaqariy Flowers

3



Chusquea intipaqariy Branch leaf



Chusquea spicata Habit

5



Chusquea spicata Flowering heads

Treeline ~3400m a.s.l. (Photos 6-15)



Chusquea scandens Branching



Chusquea scandens Flowering heads



Chusquea scandens Branch leaves



Chusquea sp.B Branching



Chusquea sp.B Branch leaves

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Chusquea gamarrae

Branching

24

Chusquea gamarrae

Flowers

25

Chusquea gamarrae

Branch leaves

Chusquea dombeyana

Flowers

22

Chusquea dombeyana

Branch leaves

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Chusquea sp.A Branching





Habit





Branch leaves

Upper CF ~2200-3400m a.s.l. (Photos 32-35)





31



Aulonemia sp.B Branch leaves

33

38



Chusquea aspera Branching

34

39



Chusquea aspera Culm leaves



Chusquea aspera Habit

Lower CF ~1200-2200m a.s.l. (Photos 36-45)

32



Chusquea delicatula Branch leaves



Chusquea sp.C Culm leaves



Chusquea sp.C Branch leaves



Chusquea sp.D Branch leaves



Chusquea sp.E Branch leaves

40

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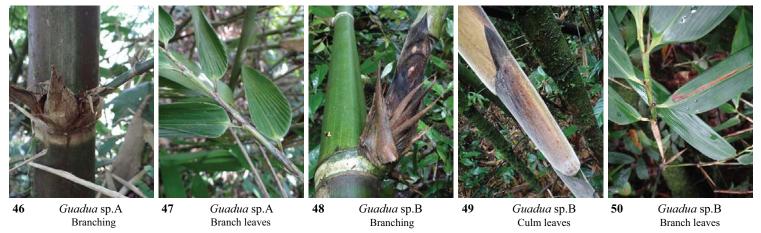


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Premontane ~500-1200m a.s.l. (Photos 46-51)





Taquara micrantha Flowering head and leaves

Reference

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